What is claimed is:

1. A light source comprising:

a light emitting unit including a light emitting layer for electrically emitting a light; and

a waveguide for emitting a light irradiated from the light emitting unit into air through a light take-out surface formed on an end face,

wherein an area of the light take-out surface of the waveguide is set to be smaller than that of the light emitting layer.

2. A light source according to claim 1, wherein the light emitting unit is formed on a side surface of the waveguide.

3. A light source according to claim 1, wherein a direction of a light propagation of the waveguide is different from a direction of a normal of the light emitting layer.

4. A light source according to claim 1, wherein the light emitting unit is optically coupled to the waveguide without an air layer provided therebetween.

5. A light source according to claim 1, wherein the waveguide has a lower refractive index than that of the light emitting layer.

6. A light source according to claim 1, wherein the waveguide has a refractive index which is higher than a refractive index obtained by subtracting 0.3 from a value of the refractive index of the light emitting layer.

7. A light source according to claim 1, wherein the waveguide is formed by using the same material as a material

of the light emitting layer.

8. A light source according to claim 1, wherein the waveguide is provided with an angle converting layer for converting an angle of a light.

9. A light source according to claim 8, wherein the waveguide includes a core having a predetermined refractive index and a clad formed on an outer periphery of the core and having a lower refractive index than the refractive index of the core, and

the angle converting structure for converting an angle of a light is formed on an interface between the core and the clad on an opposite side to the light emitting layer.

10. A light source according to claim 1, wherein the light emitting layer is formed on two surfaces or more other than the light take-out surface of the waveguide.

11. A light source according to claim 1, wherein the waveguide is provided with a reflecting plane on an opposed surface to the light take-out surface.

12. A light source according to claim 1, wherein the waveguide has an opposed surface to the light take-out surface which is not formed perpendicularly.

13. A light source according to claim 1, wherein the light emitting unit is an organic electroluminescence element.

14. A parallel light illuminating apparatus comprising the light source according to claim 1, and an optical system.

15. An image projecting apparatus using the parallel light illuminating apparatus according to claim 14.

16. A light source comprising:

a light emitting unit including a light emitting layer for electrically emitting a light; and

a waveguide for receiving a light irradiated from the light emitting unit onto a light incidence plane and emitting the light into air from a light emitting plane formed on a surface other than the light incidence plane,

wherein the waveguide has an area of the light emitting plane which is smaller than that of the light incidence plane, and has a size decreased gradually from the light incidence plane toward the light emitting plane.

17. A light source according claim 16, wherein the waveguide has an almost trapezoidal section.

18. A light source according to claim 16, wherein the waveguide is formed with an emitting angle converting structure capable of increasing a light emitting angle on the light emitting plane.

19. A light source according to claim 16, wherein the emitting angle converting structure is of a mesa type in which a section is continuously enlarged with respect to the light emitting plane.

20. A light source according to claim 16, wherein the emitting angle converting structure is a lens formed on the light emitting plane.

21. A light source according to claim 16, wherein the

waveguide forms a propagation angle converting mechanism for changing a reflecting angle of a light on a surface excluding the light emitting plane.

22. A light source according to claim 16, wherein the propagation angle converting structure is saw-toothed.

23. A light source according to claim 16, wherein the light emitting unit is constituted by an organic electroluminescence element including an anode for injecting a hole, a light emitting layer having a light emitting region and a cathode for injecting an electron.

24. A light source according to claim 16, wherein the waveguide includes a core having a predetermined refractive index, and a clad formed on an outer periphery of the core and having a lower refractive index than that of the core.

25. A light source according to claim 16, wherein the waveguide has a periphery covered with a reflecting plane.

26. A the light source according to claim 16, wherein the light emitting unit is provided with an air layer interposed together with the light incidence plane.

27. A light source according to claim 16, wherein the light emitting unit is formed with an emitting angle converting structure on a light emitting plane.

28. A light source according to claim 16, wherein the light emitting plane is formed on a surface other than an opposed surface to the light incidence plane.

29. A light source according to claim 16, wherein the waveguide has such a shape that a waveguide structure having an almost trapezoidal section and a waveguide structure having a triangular section are coupled to each other.

30. An exposing device for use as an optical printer head comprising a plurality of light emitting units arranged in a line which can emit a signal light corresponding to a data signal, and a photosensitive member capable of forming an optional latent image by irradiation of the signal light,

the exposing device comprising the light source according to claim 16.

31. The exposing device according to the claim 30, wherein a plurality of waveguides are divided optically in a main scanning direction for each pixel arranged in parallel with each other.

32. The exposing device according to claim 30, wherein the waveguide is not provided with a light shielding layer between substrates which are adjacent to each other.

33. The exposing device according to claim 30, wherein the waveguide is provided with light amount transmitting means for forming an erected equal magnification image together with a light emitting plane on an outside thereof.

34. An image forming apparatus comprising:

a photosensitive member capable of forming an electrostatic latent image;

charging means for forming a uniform electric potential on a surface of the photosensitive member by discharging means;

exposing means as claimed in claim 30 for irradiating a

signal light corresponding to an image signal, thereby forming a latent image

toner sticking means for sticking a toner onto a surface on which the latent image is formed;

toner transferring means for transferring a toner onto a transfer material; and

control means for controlling each portion, wherein a recording apparatus uses.

35. An exposing apparatus comprising:

an organic electroluminescence element including an anode for injecting holes, a luminescent layer having a luminescent region and a cathode for injecting electrons, the organic electroluminescence element being formed on a board as a light source; and

a waveguide an end face in a sub scanning direction of which is made to constitute a light taking out face and light irradiated from the luminescent layer and incident on the wave guide and emitted from the light taking out face is used as exposure light.

36. The exposing apparatus as claimed in claim 35, wherein the waveguide is integrated with a board.

37. The exposing apparatus as claimed in claim 35, wherein a plurality of pieces of the waveguides optically isolated in a main scanning direction for respective pixels are aligned in parallel with each other.

38. The exposing apparatus as claimed in claim 35, wherein the waveguide includes a core having a predetermined refractive index and a clad formed at an outer periphery of the core and having a refractive index smaller than the refractive

index of the core.

39. The exposing apparatus as claimed in claim 38, wherein the core is provided with a refractive index smaller than a refractive index of the luminescent layer.

40. The exposing apparatus as claimed in claim 35, wherein the refractive index of the core is larger than a value constituted by subtracting 0.3 from the refractive index of the luminescent layer

41. The exposing apparatus as claimed in claim 37, wherein a light shielding layer or a reflecting layer is provided between the waveguides contiguous to each other.

42. The exposing apparatus as claimed in claim 35, wherein the light taking out face is constituted by a shape in correspondence with a shape of a pixel.

43. The exposing apparatus as claimed in claim 35, wherein the waveguide is formed with an angle converting portion for converting an angle of light incident on the wave guide from the luminescent layer to guide to the light taking out face.

44. The exposing apparatus as claimed in claim 35, wherein the angle converting portion guides light in a direction other than the sub scanning direction to the light taking out face.

45. The exposing apparatus as claimed in claim 44, wherein the angle converting portion carries out angle conversion with respect to a direction orthogonal to either of main scanning and sub scanning to guide to the light taking out

face.

46. The exposing apparatus as claimed in claim 44, wherein the angle converting portion is formed at an interface between the core and the clad disposed on a side opposed to the luminescent layer.

47. The exposing apparatus as claimed in claim 35, wherein a reflecting layer is formed at least at any face of a face opposed to the light taking out face and a face of the waveguide disposed on a side opposed to the luminescent layer.

48. The exposing apparatus as claimed in claim 35, wherein the light taking out face is formed with diffusion restraining means for restraining diffusion of light emitted from the light taking out face.

49. The exposing apparatus as claimed in claim 35, wherein light emitted from the light taking out face is focused on a photosensitive member in an erected image at equal magnification.

50. An image forming apparatus comprising:

an exposing apparatus as claimed in claim 35; and

a photosensitive member formed with an electrostatic latent image by the exposing apparatus and the electrostatic latent image is properly formed on the photosensitive member and therefore, the invention carries out operation of capable of forming a high quality image.

51. An exposing apparatus comprising:

an organic electroluminescence element including:

an anode electrode for injecting holes;

a cathode electrode for injecting electrons; and

a luminescent layer formed between the anode and the cathode and having a luminescent region and a thickness of the luminescent layer is made to be thickened than a thickness of the electrode, the organic electroluminescence element being formed on a board as a light source; and

a waveguide an end face in a sub scanning direction of which is made to constitute a light taking out face

wherein light irradiated from the organic electroluminescence element and incident on the waveguide and emitted from the light taking out face is used as exposure light.

52. An exposing apparatus comprising:

an organic electroluminescence element including:

an anode electrode for injecting holes;

a cathode electrode for injecting electrons; and

a luminescent layer on a side proximate to the anode having a luminescent region and disposed on the side of the anode and a luminescent layer on a side proximate to the cathode having a luminescent region disposed on the side of the cathode, which are respectively formed between the anode and the cathode, and

charge generating layers formed between the luminescent layer on the side proximate to the anode and the luminescent layer on the side proximate to the cathode, for injecting electrons to the luminescent layer on the side proximate to the anode and injecting holes to the luminescent layer on the side proximate to the cathode, the organic electroluminescence element being formed on a board as a light source; and

a waveguide an end face in a sub scanning direction of which is made to constitute a light taking out face

wherein light irradiated from the organic electroluminescence element and incident on the waveguide and emitted from the light taking out face is used as exposure light.

53. The exposing apparatus as described in claim 52, wherein an ionization potential of the charge generating layer is higher than an ionization potential of the luminescent layer on the side proximate to the cathode.

54. The exposing apparatus as described in claims 52, wherein an electron affinity of the charge generating layer is lower than an electron affinity of the luminescent layer on the side proximate to the cathode.

55. The exposing apparatus as described in claim 52, wherein a potential difference between an electron affinity of the luminescent layer on the side proximate to the anode and the charge generating layer and a potential difference between an ionization potential of the luminescent layer on the side proximate to the cathode and the charge generating layer is set to be equal to or smaller than 0.6eV.

56. The exposing apparatus as described claim 52, wherein the charge generating layers comprises:

a first charge generating layer disposed on a side of the luminescent layer on the side proximate to the anode; and

a second charge generating layer disposed on a side of the luminescent layer on the side proximate to the cathode,

wherein the first charge generating layer is set with an electron affinity lower than an electron affinity of the second charge generating layer, and

the second charge generating layer is set to an ionization potential higher than the first charge generating layer.

57. The exposing apparatus as described in claim 56,

wherein an initially formed charge generating layer is formed by resistance heating.

58. The exposing apparatus as described claim 52, wherein the charge generating layer comprises a dielectric substance and a specific inductive capacity of the charge generating layer is equal to or larger than specific inductive capacities of the luminescent layer on the side proximate to the anode and the luminescent layer on the side proximate to the cathode.

59. The exposing apparatus as described in claim 52, wherein the luminescent layer on the side proximate to the anode and the luminescent layer on the side proximate to the cathode are formed by members the same as each other.

60. An exposing apparatus comprising:

an organic electroluminescence element including:

a plurality of anode electrodes for injecting holes;

a plurality of cathode electrodes arranged alternately with the anode electrodes for injecting electrons; and

a plurality of luminescent layers, each having a luminescent region defined between the anode electrode and the cathode electrode; and

a wave guide an end face in a sub scanning direction of which is made to constitute a light taking out face,

wherein light irradiated from the organic electroluminescence element and incident on the wave guide and emitted from the light taking out face is used as exposure light.

61. The exposing apparatus as described in claim 60,

wherein the luminescent layers are constituted by members the same as each other.

62. The exposing apparatus as described in claim 60, wherein a layer including the luminescent layer disposed between an initially formed electrode and a successively formed electrode comprises a polymer.

63. An exposing apparatus comprising:

an organic electroluminescence element including:

an anode electrode for injecting holes;

a cathode electrode for injecting electrons; and

a luminescent layer formed between the anode and the cathode and having a luminescent region, the organic electroluminescence element being formed on a board as a light source; and

a waveguide an end face in a sub scanning direction of which is made to constitute a light taking out face

wherein light irradiated from the organic electroluminescence element and incident on the waveguide and emitted from the light taking out face is used as exposure light, and

the luminescent layer is formed by a material capable of forming the luminescent layer at least by coating.

64. An exposing apparatus comprising:

an organic electroluminescence element including:

an anode electrode for injecting holes;

a cathode electrode for injecting electrons; and

a luminescent layer formed between the anode and the cathode and having a luminescent region, the organic electroluminescence element being formed on a board as a light source; and

a waveguide an end face in a sub scanning direction of which is made to constitute a light taking out face

wherein light irradiated from the organic electroluminescence element and incident on the waveguide and emitted from the light taking out face is used as exposure light, and

a stepped difference formed by the board and the electrode formed above the board is made to be equal to or smaller than a thickness of the luminescent layer.

65. The exposing apparatus as described in claim 64 wherein a layer including the luminescent layer comprises a polymer.

66. The exposing apparatus as described in claim 51, wherein the waveguide is integrated with the board.

67. The exposing apparatus as described claims 51, wherein a plurality of pieces of the waveguides optically isolated in a main scanning direction for respective pixels are aligned in parallel with each other.

68. The exposing apparatus as described in claim 51, wherein the waveguide includes a core having a predetermined refractive index and a clad formed at an outer periphery of the core and having a reflective index smaller than the refractive index of the core.

69. The exposing apparatus as described in claim 68 wherein the core is provided with a refractive index smaller than a refractive index of the luminescent layer.

70. The exposing apparatus as described in claim 68,

wherein the refractive index of the core is larger than a value constituted by subtracting 0.3 from the refractive index of the luminescent layer.

71. The exposing apparatus as described in claim 51, further comprising a light shielding layer or a reflecting layer between the waveguides contiguous to each other.

72. The exposing apparatus as described in claim 51, wherein the light taking out face is constituted by a shape in correspondence with a shape of the pixel.

73. The exposing apparatus as described in claim 51, wherein the wave guide is formed with an angle converting portion for guiding light incident on the wave guide from the luminescent layer to the light taking out face by converting an angle of the light.

74. The exposing apparatus as described in Claim 73 wherein the angle converting portion guides light in a direction other than the sub scanning direction to the light taking out face.

75. The exposing apparatus as described in Claim 73, wherein the angle converting portion converts the angle to a direction orthogonal to either of main scanning and sub scanning to guide the light to the light taking out face.

76. The exposing apparatus as described claim 73, wherein the angle converting portion is formed at an interface between the core and the clad disposed on a side opposed to the luminescent layer.

77. The exposing apparatus as described in claim 51, wherein the reflecting layer is formed at least at any face of a face of the wave guide opposed to the light taking out face and a face of the wave guide disposed on a side opposed to the light emitting layer.

78. The exposing apparatus as described claim 51, wherein the light taking out face is formed with diffusion restraining means for restraining diffusion of light emitted from the light taking out face.

79. The exposing apparatus as described in claim 51, wherein light emitted from the light taking out face is focused on a photosensitive member in an erected image at equal magnification.

80. The exposing apparatus as described in claim 51, wherein the organic electroluminescence element is driven by an alternating current, an alternating current voltage or a pulse wave.

81. The exposing apparatus as described in claim 51, wherein the organic electroluminescence element is applied with a negative voltage between the anode and the cathode when light is not emitted.

82. An image forming apparatus including the exposing apparatus described in claim 51 and a photosensitive member formed with an electrostatic latent image by the exposing apparatus and the electrostatic latent image is property formed on the photosensitive member.